

Docket No.: DiSalvo
RCE of Appl. No. 10/726,100

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

Claims 1-19 (cancelled)

20. (Currently amended) A medical instrument for use in surgical procedures made from an alloy comprising from ~~0.01% to 3%~~ 0.9% to 1.85% by weight of germanium; ~~between 0% from 5 % to 25%~~ 15% by weight relative to the germanium of at least one of a non-hydrogenic and shallow hydrogenic acceptor dopant; up to 20% by weight of one or more of the compounds selected from the group consisting of platinum, gold, palladium, iridium, ruthenium, osmium, rhodium, niobium, tantalum, tungsten, aluminum, silicon, zirconium, rare earth elements including hafnium, yttrium and lanthanum; and as a remainder up to 100% by total weight constituted by silver, and wherein the instrument is coated partially or completely with one or more of a material selected from the group consisting of biocompatible, insulating, semi-insulating compounds and ceramic materials.
21. (Original) The instrument of claim 20, wherein the said one or more material is laminated over a core material of the instrument.
22. (Original) The instrument of claim 20, wherein the instrument is produced by conventional fusion methods.
23. (Original) The instrument of claim 20, wherein medical instruments include devices selected from the group of prostheses and implants of suitable shape and size.
24. (Original) The instrument of claim 20, capable of emitting far infrared radiation upon contact with a biological tissue and which is capable of entering into

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molecular resonance vibration with bio structures and physical structures of so irradiated biological tissue.

25. (Original) The instrument of claim 20, capable of creating an ohmic contact in an electrode-tissue interface during electrosurgical operative modes.

Claims 26-29 (Cancelled)

30. (Currently amended) A surgical mono-or pluripolar electrode for use in surgical procedures made from an alloy comprising from ~~0.01% to 3%~~ 0.9% to 1.85% by weight of germanium; ~~between 0% to 25%~~ from 5 % to 15% by weight relative to the germanium of at least one of a non-hydrogenic and shallow hydrogenic acceptor dopant; up to 20% by weight of one or more of the compounds selected from the group consisting of platinum, gold, palladium, iridium, ruthenium, osmium, rhodium, niobium, tantalum, tungsten, aluminum, silicon, zirconium, rare earth elements including hafnium, yttrium and lanthanum; and as a remainder up to 100% by total weight constituted by silver, wherein the electrode exhibits no capacitive impedance in relation to an electrode-tissue interface when coming in contact with biological tissue during electro surgery.

Claims 31-32 (Cancelled)

33. (Previously presented) The instrument of claim 20, wherein the alloy has a hardness in the range from 80 to 100 HVN.
34. (Previously presented) The instrument of claim 33, wherein the hardness is in the range of 40 to 149 HVN.
35. (Previously presented) The instrument of claim 20, wherein a p-type germanium is dispersed in the form of micro crystals in a matrix of the silver.

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36. (Previously presented) The instrument of claim 20, wherein the non-hydrogenic and the hydrogenic acceptor dopants are selected from the group consisting at least one of gold, platinum, copper, gallium, indium, zinc, boron and their alloys.
37. (Previously presented) The instrument of claim 36, wherein the non-hydrogenic acceptor dopant is at least one of gold and copper.
38. (Previously presented) The instrument of claim 20, wherein the weight ratio of the acceptor dopant relative to the germanium is less than 15%.
39. (Previously presented) The instrument of claim 38, wherein the weight ratio of the acceptor dopant relative to germanium is at least 5%.
40. (Previously presented) The instrument of claim 20, wherein the germanium is present in the form of p-type germanium microcrystal dispersed in a matrix of the alloy and capable of emitting far infrared radiation in the electromagnetic spectrum with a frequency range from 0.1 to 4 THz.
41. (Previously presented) The instrument alloy of claim 40, wherein the p-type germanium micro crystals dispersed in the alloy matrix are capable of stimulation to an emission of far infrared radiation from a source of energy.
42. (Previously presented) The instrument alloy of claim 41, wherein the energy is selected from the group consisting of sources of thermal energy, electro-thermal radiofrequency, body heat, ultrasound, microwave energy, laser energy, solar energy, DC current, AC current, biological energy, chemical energy.

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43. (Previously presented) The instrument alloy of claim 20, wherein the alloy is resistant to processes selected from the group consisting of sulfurization, corrosion and oxidation.
44. (Previously presented) The instrument alloy of claim 20, having a hardness of HVN from 32 to 203 or more depending on the use thereof.
45. (Previously presented) The instrument alloy of claim 20, wherein the alloy is capable of emitting anions.
46. (Previously presented) The instrument of claim 20, wherein the alloy possesses fractal surfaces.
47. (Previously presented) The instrument of claim 20, wherein the germanium containing alloy exhibits a thermal conductivity above 0.35 W/cm K. degrees.
48. (New) The instrument of claim 20, wherein the alloy contains germanium in the range from 1.1% to 1.85%.
49. (New) The instrument of claim 30, wherein the alloy contains germanium in the range from 1.1% to 1.85%.